

INDIANA KARST CONSERVANCY, INC

PO Box 2401, Indianapolis, IN 46206-2401

ikc.caves.org

Affiliated with the National Speleological Society

The Indiana Karst Conservancy is a non-profit organization dedicated to the conservation and preservation of caves and karst features in Indiana and other areas of the world. The Conservancy encourages research and promotes education related to karst and its proper, environmentally compatible use.

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Cover: Ty Spatta in Devil's Graveyard Cave, Harrison County, Indiana. Photo by Mark Sparks, 2008.



QUARTERLY MEETING REMINDER SATURDAY, JUNE 27th, 6:00 PM EST BLOOMINGTON, INDIANA IU GEOLOGY BUILDING, ROOM 143

The quarterly meetings are for the elected Board to conduct business and for our members and other interested persons to have an open forum to talk about caves and karst conservation and related topics. Past, present, and future IKC projects are discussed to solicit comments and input from our members and the caving community as a whole. The meetings are informal, and everyone is encouraged to attend and participate. The IKC Board wants your input.

Preliminary Agenda Items: Brief recap of the last quarter's activities; White-nose Syndrome issues; Indian Creek Conservation Easement status; Clean-up funding; Endless Cave gate participation; Treasurer's report; Land acquisition activities; and more...

Meeting directions: The Geology Building is located at 10th and Walnut Grove. Tenth Street runs east/west and is one of the major streets that run across the IU campus. Park behind the building, parking permits are not enforced on weekends. Enter the building from the rear at the west end. The room is halfway down the hall on the right.

ACTIVITIES CALENDAR

June 27 – IKC Quarterly Meeting, Bloomington (see above)

June 27 – Hancock Property Workday, Bloomington 1 PM

Aug 14-16 – Cave Capers, Camp Rivervale, Lawrence County

Sept 19 – Lost River Tour, Orleans

Sept 19 – 3rd Annual Bat Festival, Terre Haute

Sept ?? - IKC Quarterly meeting (date and location to be determined)

For more information on the Indiana Karst Conservancy, visit our website at *ikc.caves.org* or write to our PO box. Membership to the IKC is open to anyone interested in cave and karst conservation. Annual dues are \$15. Please see inside the back cover for a membership application form or to make a much-appreciated donation. Donations can also be made by credit card using the donation button located on our website's home page.

The *IKC Update*, distributed for free, is published quarterly for members and other interested parties. The purpose of this newsletter is to keep the membership and caving community informed of IKC activities and other news related to cave/karst conservation. Submission of original or reprinted articles for publication is encouraged.

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RAMBLINGS FROM THE PRESIDENT...



The coming of white-nose syndrome (WNS) has become another inconvenient truth. The thing that ties us together in the IKC is that we are cavers, and we are accustomed to a life long experience

of being able to cave almost anywhere we want. In the past we've had to avoid bat hibernacula during the winter closures, but the winter closures end and in the big scheme of things not that many caves were involved.

So life has been pretty good to cavers as far as access goes. Perhaps our biggest challenge was nurturing land owner relationships. Now we are coming into a new world where cavers are basically being asked to find something else to do. And the specter of government mandated closure of privately owned caves.

From the standpoint of the IKC, my position has been to try to lead us into a management arrangement that is conservationfocused while maintaining the goals of our organization, including cave and karst education. In a political climate in which state and federal agencies are calling for wholesale cave closures, the IKC has taken a more measured approach.

Preferring to err on the side of caution, the IKC board decided to close our three caves managed as Indiana bat hibernacula: Grotto, Coon, and Robinson Ladder. If someone has a good reason to go in one of these sites, the organization will consider permitted entry on a case by case basis. Even before anyone had heard of WNS the IKC observed seasonal closures of these sites, but permitted entry for activities like bat population counts. Only time will tell if the closures will have any effect on controlling the spread of WNS.

The IKC is keeping our other caves, like Wayne and Sullivan (among others), open to entry. As always, entry will be only with permission. Most of the caves managed by the IKC are gated and we have always had expectations as to how persons entering will conduct themselves. This included the usual "caving softly"... If you carried it in, you carry it out. Take all the pictures you want, but we'd just as soon you not leave footprints anyplace where there aren't any already... That sort of thing. To these expectations we now add "WNS precautions", which basically consist of not carrying fungus into our (or anybodys') caves. And then cleaning up afterward so that no one takes any fungal souvenirs to the next place.

There are still things I don't understand about the request to discontinue entering caves in Indiana. Why should an Indiana caver not go in Indiana caves? I haven't been anywhere close to a WNS infected cave and I keep my gear clean. So it remains unclear to me why my presence would have any more consequence to the cave than previously. And I would like to think that I do have the sense to conduct myself in such a way that I don't become a contamination threat. Case in point, I was going to extend my ongoing bioinventory of IKC owned or managed caves to Coon and Grotto caves this summer, but have decided to work somewhere else to avoid the bat caves. I've heard lots of other plans by various Indiana cavers who are modifying their plans accordingly, like putting aside different sets of equipment for caving in Indiana vs. Kentucky.

One of the personal challenges I've been grappling with during the WNS crisis is the many requests I've received to go to bat for cavers in the face of wholesale cave closures. This I have done – more than most would know – but I question the appropriateness of doing so under the auspices of the IKC. I see the mission of the IKC being to champion the cause of caves and karst, not cavers and caving. Never-the-less, I will continue to pursue all of these missions, quietly.

NEWS BRIEFS...

- The IKC annual elections on March 21st yielded no new changes to the Executive Board. Dr Jerry Lewis was re-elected President, James Adams was re-elected Secretary, and Keith Dunlap was re-elected Treasurer. Directors re-elected were Dave Haun, Bruce Silvers, Karen Silvers, and Tom Sollman. The other Directors serving on the Executive Board are Bruce Bowman, Don Ingle, Kriste Lindberg, Steve Lockwood, Bob Sergesketter, Bob Vandeventer, Richard Vernier, and Jamie Winner.
- On April 18th, thirty-nine volunteers showed up for the IKC's Under-Earth Day workday at the Buddha Karst Nature Preserve to plant 1,300 trees (chinkapin oak, shumard oak, white oak, red oak, scarlet oak, black oak, black cherry, black walnut, persimmon, and flowering dogwood). Including these new

seedlings, over 5,200 trees (approximately ten acres) have been planted since 2002 as part of a long-term reforesting project at this 37-acre property. There were two Boy Scout groups (Troop 88 from Bordon and Troop 136 from Bloomington) and a Girl Scout group (Troop 264 from Bloomington) assisting this year. Troop 88 included Jerry, Salisa, Geoffrey, & Alexandra Lewis, Michael & Joe Lynch, and Kelsie Logsdon. Troop 136 included Lynne, Tyler & Justin Crohn, Sam & Jason Martin, Cindy & Eric Sandeno, and Shane Springgs. Troop 264 included, Melanie Martin, Michaela & Heather May, Tiffany Spriggs, and Sarah & Patrica Wieligman. Caver volunteers included Bill Baus, George Cesnik, Terry Clark, John Danovich, Keith & Bambi Dunlap, Michelle Gray, Don Ingle, Mark Kraus, Steve & Noah Lockwood, Everett Pulliam, Tom Rea, Tom & Robert Sollman, Dick & Sue Vernier, and Jeff Ziegler. Partial funding for the trees this year were provided by a conservation grant from the Dogwood City Grotto.



- □ Those of you who have wandered around Washington County may be familiar with the old mill at Beck's Mill fed by impounded water from Click Cave. The mill, constructed in 1864, has been inoperable for over 50 years and the structure was deteriorating badly before a non-profit group formed and Bill Cook funded the restoration. It took three years, but the mill is now once again functional as a historic site. The mill is open Friday, Saturday, and Sunday (noon to 4 PM) through November. There is a small admission fee to help support the organization. In addition to the mill, there are several loop trails (the longest is 2 miles) that take you past karst features and Sulphur Spring. For more information, go to *www.friendsofbecksmill.com*.
- Most of the IKC's basic operating expenses and obligations (newsletter, insurance, property taxes, routine stewardship activities) are paid with membership dues. However, we are greatly dependent upon additional donations to supplement and support the many other projects the IKC initiates. Since June 2008, 47 individuals and 6 organizations have made general donations totally more than \$3,500. Donors include John Ahlberg, David Anderson/Sue O'Shields, John Benton, Ted Bice, Don Bohling, Bruce Bowman, Carl Brown, Larry Bundy, Chris Carpenter, Martin Church, Jeff Cody, Andrew Dubois, Keith Dunlap, Jeff Farr, Barbara Hanka, Dave Haun, Dwight Hazen, Martin Heimlein, Tem Hornaday, Jason Kern, Glenn Kotnik, Mark Kraus, David Lasser, Brian Leavell, Jerry & Salisa Lewis, Robert Masta, Doug Moore, William Morrow, Carl & Louise Nel-

son, Nick Noe, Shannon Obendorf, Michelle Owens, Nate Pate, Ernie & Jacqueline Payne, Russ Pulsilo, Steve Ragsdale, Kelle Reynolds, Ralph Sawyer, Bob Sergesketter, Gordon Smith, Kevin Smith, Susan Strickland, Johanna Thordenberg, Mark Van Buskirk, Bob Vandeventer, Dick & Sue Vernier, Scott Worpell, Kevin Wyatt, Bluespring Caverns, Bowling Green University, Dogwood City Grotto, Greater Cincinnati Grotto, BSA Troop 104, and The Robertson Association.

- □ And while all of our current preserve projects are fully funded, we want to be preparing for the next project and a number of members have made donations into our restricted Land Acquisition Fund. Since June 2008, over \$1,900 in donations have been received. Donors include David Anderson, Brad Barcom, Jeff Cody, Scott Fee, Keith Dunlap, Scott Hammon, Doug Moore, Shannon Obendorf, Ernie Payne, Done Peters, Everett Pulliam, Charles Rex, Kelle Reynolds, Russ Romme, Cindy Sandeno, Gordon Smith, Mark Webb, Rich Whisler, Northern Indiana Grotto and St Joseph Valley Grotto.
- □ The IKC had one new member in the past quarter. Welcome Shane Myles (484). Also Ralph Doerzbacher (247) has rejoined after being absent for several years. Our membership stands at 191.

IKC's REVISED CAVE ACCESS POLICY

Effective date: May 1, 2009

As many of you know, white-nose syndrome (WNS) is seriously impacting several species of bats in the northeast and is likely to spread as time goes on. It is too soon to tell how fast it will spread to major hibernacula in the Midwest, if an intervention can be formulated, or a natural response will slow or stop the disease. Regardless, federal and state agencies are reacting to the concerns. While some precautions and closures are warranted, some agencies are at a loss and are probably overreacting by closing down everything in an attempt to do something. It is too soon to judge if those actions are appropriate or necessary, but it is what it is.

The IKC, being an owner and manager of several caves, some purchased or managed for the protection of bats, while others focused on recreation or other resources, also needed to decide what is best for the bats in some situation, and what is reasonable for cavers in others. As such, the IKC Board had been discussing and the issue since early April and consulted with agencies and other land management organizations. With the winter closures at three of our caves ending May 1st, we wanted to have an appropriate decision for those caves. As such, the Board adopted the following policy:

"As a preventative measure for white-nose syndrome, the IKC will suspend 2009 summer visitation at Coon, Grotto, and Robinson Ladder caves except for approved scientific research. Access to other IKC managed caves will remain open with the added stipulation of practicing appropriate 'safe' cave gear/clothing precautions."

So for the three bat caves, there will be no permitted access this year. For the other caves owned or managed by the IKC, we think we are being responsible by simply asking all visitors to these caves to take proper precautions to make sure their gear and clothing are clean/decontaminated before visiting. This is especially true for any cavers who have caved in the 17 eastern states identified by the USFWS as being at potential risk for WNS. There are a number of good websites accessible from the NSS website (www.caves.org) on decontamination procedures and other recommendations to prevent the transportation of fungus spores. Cooperation within the caving community will go a long way to demonstrate we are caving responsibility.

INDIANA CAVE SYMPOSIUM 2009 OVERVIEW

by Dave Everton

The Lawrence County Fairgrounds Community Building was selected for the 17th annual event, which was held this year on April 18, 2009. Many cavers were out and about earlier that day; some of them planted trees at the nearby Buddha Karst Nature Preserve, while others were preparing Richard Newton's property in Orange County for the annual HogFest, while others simply just went caving. The Symposium was again co-hosted by the Indiana Karst Conservancy and Indiana Cave Survey, with each organization sharing the food costs, which included burgers, brats, hot dogs, buns, and soft drinks. Attendees helped out by bringing side dishes, desserts, chips, and the like to complete the cookout for the first part of the event.

The Community Building has two levels, the lower of which contained a kitchen and was used for dining. Later, technology guru 'Slide Show Bob' Vandeventer got all the presentations loaded upstairs, and the show began at close to 7:30. The following summarizes the presentations.

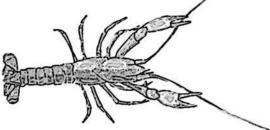
- IKC Education & Outreach Committee Update: Kriste Lindberg summarized recent partnerships with groups and agencies, and even had a couple of special guest teachers from northern Indiana along, who told of cave and karst education efforts in their own classrooms.
- 2009 Bat Census: Keith Dunlap had charts, pie graphs, and lots of other illustrations to help explain the results of this year's biennial census. The counts were down from the past several census and the uncertainty of the spread of white-nose syndrome casts questions on how it will affect Indiana's bat populations.
- White-Nose Syndrome What It's Done, Where It Is, and Why You Should Care: Todd Webb has been closely following the WNS issue, and had lots of info to bring everyone up to date about this little-understood plague, which has initially caused great devastation to bats in

the northeast part of the country, but appears to be ultimately heading toward our area as well.

- The New ICS Online Database: Randy Jackson has recently completed development of a new web-centric database utilizing a MySQL and php software interface. Although Randy wasn't present to present (word choice intentional), thanks to Rob Jarboe and his ability to access the internet with his laptop, Dave Everton and Rob were able to show the audience a quick tour of the current interface and capabilities.
- **Biota protected in IKC Preserves:** Although Jerry and Salisa Lewis are responsible for the presentation, Jerry did the talking in his always delightful fashion, focusing on the results of the various bug collections they've done in all the caves underneath IKC-owned properties.
- Buckner Restoration Project: Bill Baus has been coordinating Phase 2 of the effort to remove graffiti in the cave since October 2007, which utilized the Peppersauce Cave Conservation Project's sandblasting equipment until October 2008. Not only did he give an overview on the entire project which began in 2005, but he also brought everyone up to date on recent efforts, including some new photos of the Volcano Passage without graffiti, which were quite impressive.
- Caves of the Greater Stinesville Area: Dave Everton, Ty Spatta, and others have been working on and off for years in and around Stinesville, documenting and mapping caves, an effort started by Richard Powell and others in the early 1970s. The presentation summarized the efforts of many, both recent and long ago.

A hearty thanks to everyone who made this year's Indiana Cave Symposium a success, from planners, to presenters, to sponsors, to burger grillers, and attendees!! Interested in presenting in the future? Just let it be known!! Hope

to see you next year!



CAVE CLOSURES IN INDIANA

by Keith Dunlap

This issue of the *IKC Update* has a lot of content dedicated to white-nose syndrome (WNS). Currently, this devastation is just in the northeastern states, but the rapid spread in just three years makes it clear it will eventually reach Indiana. As such, the land-holding agencies (primarily the Indiana DNR and the Hoosier National Forest) in conjunction with the US Fish & Wildlife Service have reacted with closure orders on publiclyowned caves. Following are the text from their press releases:

DNR Closes Caves To Slow Bat Disease Spread

Indianapolis, IN May 1, 2009 – Caves on state properties will temporarily close as a precaution against the uncontrolled spread of white-nosed syndrome (WNS), which is killing bats in record numbers in the eastern United States.

There is no known human health risk associated with WNS in bats. While the actual cause of WNS is unknown, scientists are reasonably certain that WNS is transmitted from bat to bat. However, WNS has been found in caves a significant distance from WNS-affected hibernacula, leading scientists to suspect humans may inadvertently carry the fungus from cave to cave where bats hibernate.

"Although we have not seen this disease in Indiana, the responsible thing to do is close our caves to help slow expansion of WNS," said DNR director Robert E Carter Jr in announcing the decision. "Scientists need time to get a handle on the problem and solve it."

The voluntary action is effective May 1 and closes public access to all caves, sinkholes, tunnels and abandoned mines on DNR-owned land, except Twin Caves at Spring Mill State Park. Twin Caves is able to remain open because it is a water cave with controlled boat access only and the WNS fungus settles in soil.

The closure extends through April 2010 and follows similar steps taken elsewhere in response to a U.S. Fish & Wildlife Service advisory asking cavers to curtail cave activities in WNS-affected states and adjoining states. The Hoosier National Forest has closed all caves, as has Great Smoky Mountains National Park.

"As (this) spreads, it threatens bat populations not only in the northeastern United States, but in the Midwest as well," said US Fish and Wildlife Service Regional Director Tom Melius. "The Service strongly supports Indiana's pro-active approach to safeguard the state's bats. The Hoosier state is home to critically important hibernacula for endangered bats, and we believe Indiana's action is a significant step in keeping whitenose at bay as we work together toward a solution."

Three commercial cave operations - Blue Springs

Caverns, Marengo Cave and Squire Boone Cavernswill remain open, and the DNR and US Fish & Wildlife Service are working with those businesses to develop appropriate steps to minimize the spread of WNS.

The DNR also is working with owners of private caves where significant bat hibernacula are known to exist to encourage them to close access.

The population density of bat species in the southern part of Indiana, especially the federally endangered Indiana bat, prompted the cave closures on DNR sites.

"We have a really strong reason to be cautious," said Katie Smith, head of DNR's Wildlife Diversity Section. "Indiana has thousands of cave-dwelling bats, and this devastating disease puts them all at risk. Bats are important to our ecosystem and natural heritage, and we must take every reasonable precaution to protect them."

The disease got its name because affected bats appeared to have a white substance on their heads, often around their noses, and on their wings. WNS has killed an estimated 500,000 bats from Vermont to West Virginia and continues unchecked. In some hibernacula, there has been 90 to 100 percent mortality.

WNS was first recorded in 2006 in a cave near Albany, NY, and within two years had spread to Connecticut, Massachusetts and Vermont. Bat deaths were confirmed this past winter in at least seven states, including new outbreaks in Virginia and West Virginia.

Forest Service Issues Cave And Mine Closure Order To Protect Endangered Bat Species

Bedford, IN April 24, 2009 – In response to the uncontrolled spread of white-nose syndrome affecting bat species, all caves and mines on the 14 national forests in the 20-state Eastern Region have been closed by Forest Service managers for one year. The closures will allow scientists time to study the white-nose fungus and learn more about how it is spread.

Nearly 500,000 bats have died as a result of whitenose syndrome in the New England and Mid-Atlantic states, including almost 25,000 endangered Indiana bats. White-nose syndrome is named for a white fungus that appears on the faces, ears, wings, and feet of hibernating bats. The disease causes bats to come out of hibernation severely underweight, often starving before the insects – on which they feed – emerge in the spring. Once a colony is infected, it spreads rapidly and has the possibility of killing over 90% of bats within the cave in just two years.

Scientists believe the fungus is spread bat-to-bat as they cluster in caves and mines, and there is evidence that it can be unknowingly transferred from one cave/ mine to another on the footwear and gear of humans. There have been no reported human illnesses attributed to the fungus. Infected caves and mines may not show obvious signs of its evidence.

On the Hoosier National Forest in Indiana, all caves are closed. "Staying out of caves is the one thing we can do right now to slow the spread of the fungus," said Steve Harriss, wildlife biologist on the Forest.

The Hoosier is home to several species of bats, in-

cluding the federally endangered Indiana bat, and gray bat. Bats are a natural and important part of the forests, making a significant contribution towards the control of forest and agricultural insect pests.

For additional information, contact Steve Harriss, at the Forest Service Bedford, IN office, 812-275-5987, *scharriss@fs.fed.us*.

BURN BABY, BURN

by Keith Dunlap

While the IKC's primary mission is karst protection and education; as we have acquired cave/ karst properties, we have also taken on the role of being good stewards for the land above the caves. This has included reforesting projects at our Sullivan and Buddha properties and our prairie restoration project at Robinson Ladder Cave preserve. In all three examples, the goal is to convert the previous fescue-dominated open fields into more natural habitats (either hardwood forests or natural grass openings). In addition to the ecological improvements we are creating, there are also longterm property tax benefits as our properties will eventually qualify for Indiana's Classified Forest and Wildlands Program (the Sullivan and Wayne properties have already been enrolled in the program, reducing our property taxes on these two properties to only \$5/year).

From the title of this article and the photo to the right taken at the Robinson Ladder Cave preserve, it might not be clear what burning has to do with restoration. Actually burning used to be a very natural occurrence that has only been suppressed for the past several hundred years. Burning keeps areas open and encourages native grasses.

The decision to pursue open "prairie" at Robinson Ladder rather than reforesting was based upon several factors. First, having a mixed forested/natural grass openings is thought to be ideal summer habitat for the Indiana bat. Second, the lower field at Robinson Ladder was surveyed and was determined to have a number of natural plants, although fescue was still dominant (and the upper field was essentially all fescue). Third, the conversion could qualify for the Wildlife Habitat Improvement Program (WHIP) covering 75% of the costs. Fourth, The Nature Conservancy offered to cover the other 25% if the IKC would do the "leg" work.

As it turned out, much of the "leg" work is really paper work. This included applying for the WHIP funding, working with the District Biologist



to draft a management plan, and applying for the air quality/burn permit from IDEM. We also had to find a licensed contractor who could spray the fields to kill the fescue and another contractor who could perform the burn. All of this "leg" work was performed by John Benton and Jamie Winner.

Then of course, you need Mother Nature's cooperation. For a proper and safe burn, you only have a small window of opportunity each fall and spring. It took several attempts to get the right moisture and wind conditions for our first burn, but it finally happened on March 18th.

We likely will need several more burns to get the native grasses established and we may end up having to drill native seeds depending upon what shows up naturally. These future expenses will be the responsibility of the IKC, but they will be partially offset by property tax savings once the property is enrolled in the Classified Forest and Wildlands Program.

WHITE-NOSE SYNDROME STAKEHOLDERS MEETING

by Jerry Lewis

On May 21 a meeting was hosted at Spring Mill State Park by the US Fish & Wildlife Service (USFWS) and Indiana Department of Natural Resources (DNR). The purpose of the meeting was outreach to stakeholders of caveroosting bats in Indiana. The meeting was held in the large meeting room in the Spring Mill Inn and was well attended. Grottos, commercial cave owners, government agencies, and other organizations were asked to send only 2-3 persons each, but the IKC was heavily cross-represented because of the presence of most members in several organizations. Board Members present included Keith Dunlap, Jerry Lewis, Kriste Lindberg, Bruce Silvers, Karen Silvers, and Bob Vandeventer.

The evening started with an introduction by John Davis (Deputy Director over DNR's landholding divisions), who kicked things off with the now well-known video shot by CBS News of a visit to Mt. Aeolus Cave in Vermont. The video featured an interviews with bat biologists explaining the history of research at the site and the discovery of the devastation of the bat colony by white-nose syndrome (WNS). Shown were bats clustering in the sub-freezing temperatures in the dripline area of the cave. Immediately inside, the floor was littered with thousands of dead bats.

After the video Andy King from the Bloomington Field Office of the USFWS gave a detailed presentation on what is known about WNS to date. In a nutshell, the first evidence of the disease was in photographs of bats in Howe Cavern, a commercial cave in New York, in early 2006. Subsequently WNS has been found in nine states, as far south as Virginia. A map prepared by Bat Conservation International based on known dispersal patterns of cave bats suggests that the epidemic will travel next through Tennessee and Kentucky into Indiana. Known mortality of the disease is 80-100% for some *Myotis* species, increasing rapidly at a given site over time.

The spread of WNS by humans was suggested by the visit of a group from a New England outing club that had visited an infected cave, and then travelled to another cave in Virginia with dirty equipment. The connection is not proven, but strongly suggestive.

The last speaker was Scott Johnson, mammalogist from the Wildlife Diversity Section of DNR. Scott focused his presentation on Indiana, talking about trends in bat populations in caves here. Indiana remains the most important population center for the endangered Indiana bat, with over 50% of the surviving bats wintering here. Besides the Indiana bat, all species of cave inhabiting bats have now been found infected with WNS.

After the three presentations, the meeting was opened to comments and questions from the audience. Besides the three presenters, Scott and Lori Pruitt from the USFWS were also taking questions and a number of DNR agencies were represented in the room. The tone of the meeting changed shortly from informative to adversarial as various cavers voiced their frustrations with the closure of many caves and fears of wrecked owner relationships.

That not-withstanding, much good information could be gleaned from the presentations as well as some of the comments given during the question and answer session. John Davis stated repeatedly that he had little concern about organized, conscientious Indiana cavers caving in Indiana. This was somewhat at odds to the position voiced by the folks from the USFWS who preferred that cavers refrain from entering caves at all until the epidemic had played out.

One of the concerns of the cavers present was how to comply with WNS caving precautions when doing vertical work, as soaking rope and harnesses in bleach seems extremely unwise. One of the representatives from another state agency voiced his belief that common sensed cleanliness with soap and water in a timely manner would be very effective in eliminating contaminants. Conversely, using dirty clothing, equipment, or vertical gear was inviting disaster.

Near the end of the meeting I asked what other suggestions the USFWS had for the IKC in managing our Indiana bat hibernacula, beyond the closure to visitation that has already been mandated by the board. There were no further recommendations for the sites, but they requested that we (and other cavers) keep a close eye out for warning signs including dead bats in and out of caves, abnormal entrance clustering during the winter months, flying outside during the winter months during the day, and of course the tell-tale whitish fungus on the bats themselves. The expectation of the USFWS is that WNS will spread further and may be found in Indiana as soon as the winter of 2009-2010. Investigation of options for stopping the epidemic takes time and that is viewed as a commodity in very short supply. The cave closures are viewed as a stopgap measure that might buy some time to allow WNS research. The consequence of failure is the decimation or extinction of 25 bat species.

[Editor's comment - While I think all cavers are very concerned with what WNS will ultimately do to our bats, there is a large divide in the precautions the agencies want to implement and the cavers think will be effective and are reasonable. At the meeting, USFWS and DNR indicated they wanted to move forward with a press release that would ask all private landowners in Indiana to close their caves. This was a very contentious position and obviously the cavers are concerned with what that will do to caving as an activity. Since that meeting, a number of representatives from the caving community have engaged in conversations with John Davis and Scott Pruitt to try to establish some middle ground to prevent the potential spread of WNS by humans while still allowing responsible caving.]

WINTER HIBERNACULA DISTURBANCES

by Keith Dunlap

Since 1990, the DNR and IKC have been monitoring various Indiana bat hibernacula. Some like Jim Ray's, Coon, and Grotto caves have been monitored consistently, while others like Wyandotte, Saltpeter (Crawford County), Gypsy Bill Allen, Robinson Ladder, and Endless have been occasionally. The monitoring has been done by various means, including the SpeLoggers designed and fabricated by the IKC (specifically by Dick Vernier).

The monitoring is primarily used to measure our effectiveness in controlling access during the winter closure periods and to determine where other management techniques may be required. The number of disturbances can also be used to correlate with population trends – we have seen a clear inverse relationship at Coon and Grotto caves where decreasing disturbances has resulted in increasing population growth. In fact, since 1996 when we became more aggressive at Coon and Grotto caves, we have only recorded a total of one unauthorized winter visit. Prior to 1996, we were seeing and average of 10 disturbances per winter.

In Jim Ray's Cave, we have been a little less successful, averaging 1.5 disturbances per winter, but that is still only 25% of the number prior to 1996 and the disturbances that have occurred generally have not been during the critical core months from November to March.

Since 2003, we have been monitoring Endless Cave. Since the owner allowed winter visitation into this cave despite it being an Indiana bat hibernacula, the disturbance numbers have been pretty high (about 65 trips per winter). With TNC/DNR acquiring the property in 2008 and the property being temporarily closed (and the cave entrance posted), the disturbances dropped to just 5 trips last winter. However, assuming the property reopens in the future, it is likely the winter violations will again increase somewhat without a physical deterrent (i.e., a gate).

	Number of Disturbances			
Winter	Coon	Grotto	Ray's	Endless
08/09	0 (1)	0 (1)	4 (1)	5 ⁽¹⁾
07/08	0	0	1	60
06/07	0 (1)	0 (1)	0 (1)	
05/06	0	0	1 (2)	82
04 / 05	0 (1)	0 (1)	0 (1)	66 ⁽¹⁾
03/04	0	0	2	51
02/03	0 (1)	0 (1)	5 (1)	2
01/02	0	0	0	
00/01	0 (1)	0 (1)	0 (1)	
99/00	0	0	2	
98/99	0 (1)	0 (1)	3 (1)(2)	
97/98	1	0	1	
96/97	0 (1)	0 (1)	0 (1)	
95/96	9	4	3	
94 / 95	8 (1)	5 (1)(3)	8 (1)	
93/94	(4)	(4)	(4)	
92/93	3 (1)	8 (1)	7 (1)	
91/92	1	5	6	
90/91	8 (1)	n/a	4 (1)	
1) Excludes one visit for biennial bat census				
2) Excludes one visit approved by USFWS				
3) Spelogger failed on day 182 of 227 days				
4) Data loss due to improper batteries				

IKC EDUCATION AND OUTREACH COMMITTEE REPORT

by Kriste Lindberg, Chairman

Change... white-nose syndrome is causing change in the caving world and we, as educators, are working towards meeting the needs.

With heightened awareness of caves and bats, in general, comes more interest. And, once folks are aware and interested, they can be more receptive to moving forward with enhanced knowledge.

It is unfortunate that the affliction is coming our way, but we can incorporate the knowledge being gained and use it to further our goals, embracing the new energy and adapting along the way.

The additional perspective is being utilized to our advantage – we are working the information, as it is updated and where it is appropriate, into our programming as we progress, partnering with related agencies to get the word out and combining it with education on bats and caves, in general.

To meet some of the expanded needs, we are holding a "Bats of Indiana" talk by John Whitaker, Professor, Indiana State University and Director of the Center for North American Bat Research and Conservation, author of *Bats of Indiana*, *Mammals of Indiana*, and *Audubon Society of North American Mammals*. It will take place in Bloomington on October 28, 6:30 pm – 8:30 pm at the Monroe County Public Library and is free to the public. The presentation will include the latest findings on WNS. Other upcoming educational events, included:

• Hoosier Outdoor Experience 2009, Fort Harrison State Park, September 25-27. The IDNR

is hosting this first-time-ever event and it will be HUGE! They have asked for us to be there with our 37-foot inflatable cave. We won't let them down...

- Third Annual Indiana State Bat Festival, Indiana State University, Terre Haute, September 19. We will have our inflatable cave, karst/groundwater model, and more.
- Project Underground workshop, Twin Lakes Lodge, Bloomington (date to be finalized). Participants will learn how to present a number of cave and karst activities, including how to develop responsibly in karst areas, and more during this workshop. They will also receive the activity guide, a cave poster, many handouts, and a cloth tote bag.
- Willis Blatchley Birthday and Nature Celebration, Bloomington, October 2-4. This three-day event to celebrate the 150th birthday of noted Indiana naturalist, Willis Blatchley, is sponsored by the Sassafras Audubon Society and related agencies. It will cover a variety of outdoor activities, including a tour of Leonard Springs Nature Park to visit karst features, creek walks, bird watching, and more. For updates, visit: www.sassafrasaudubon.org.

In addition, we are moving right along with our service learning projects, some of which include



Dave Everton instructing 6th graders about karst and ground water at Leonard Springs Nature Days (Bloomington)



Citizen Scientist Certification, which was discussed in the March *IKC Update*. Over the summer, we will be implementing suggestions made by our partnership with the IU – Kelley School of Business marketing class.

Additionally, we have completed the Cascade Creek Watershed Study with the Indiana University – Human Biology capstone course (in the process, all students received Citizen Scientist Certification as well as the Bravo Award for volunteer efforts) through Bloomington Parks and Recreation. It has led to more partnerships, which will take place in the future.

Coming up this summer, we will once again be working with Indiana University. This time to coteach a two-week summer science camp which will be focusing on water – the Bernard Harris Summer Science Camp. Close to 75 middle school students will be coming in from around the state to participate. We will be educating them on water resources by taking them on tours of karst-rich parks, introducing them to the karst/groundwater model, water quality monitoring, and storm drain marking. They will be our first middle school Citizen Scientists!

Overall, the past three months the Education Committee has been very busy... additionally, I gave a presentation on the IKC's education accomplishments for 2008 at the Indiana Cave Symposium in April and again, including a few updates, at the Central Indiana Grotto meeting earlier this month. During the Symposium presentation, we interjected two middle school teachers from northern Indiana who joined us to discuss how they have been incorporating cave education into their curriculum. Thanks to Dave Tibbets of the SJVG for introducing us! We are now working together to strengthen each others involvement and create a win/win situation. For example, we are discussing presenting together at the Hoosier Association of Science Teachers (HASTI) conference in February and also partnering at professional conferences around the country that are geared towards teachers. School teachers are becoming our latest and greatest advocates.

Earlier this spring, we introduced another realm of educators into our midst – Bible school teachers! Our newly created inflatable cave was constructed at a Baptist church in Bloomfield, thanks to Don Ingle, Bob Vandeventer, and Sandy Clark. Sandy used it during their week-long bible study. It surely attests to the endurance of the cave and students! As you will recall, we received fund through the National Speleological Foundation to purchase equipment to strengthen our committee, including making it possible to construct one cave for each of our three coordinators, along with the other "traveling trunk" resources.

In addition, we have received a second karst/ groundwater model, thanks to IKC funds! This one will be part of the traveling trunk in central Indiana. Thanks to Bob Vandeventer, our traveling trunks are coming together nicely.

The end of May saw the completion of Leonard Springs Nature Days III, where we had succeeded in taking approximately 900 Monroe County 6th graders out to Bloomington Parks and Recreation's Leonard Springs Nature Park, in partnership with Sycamore Land Trust, to treat them to learning stations on karst, creeks, wetlands, forests, and soils. The effort took place over the Fall 2008 and Spring 2009 semesters. We recently held a decompression meeting for the event where it was announced that the students made a number of sig-

ANNUAL CAVE PATRON / PROPERTY MANAGER REPORTS

Each year at the Annual Business Meeting, the Cave Patrons and Property Managers are asked to give a verbal summary and submit a written report describing the prior year's activities and incidents, and to make any future recommendations needing implementing. The following is a compilation of the reports for calendar year 2008:

Buddha Cave Patron Report (Jeff Cody)

This past year there were eight trips arranged with me. Forty-nine people were present on these trips. These trips were made all during the year with the exception of spring. I had asked all of the trip leaders to report any problems, trash or incidents, but none were reported. I did have one planned trip in the spring that was called off due to rain.

In early August I had a small group drive down from Canada to visit Buddha and some others in the area. They met a few local people for the trip. Buddha was the main objective. I also had a small group from California come in December. They were here to visit relatives for the holiday and had been to the cave in their youth. I would also note that two trips that requested permits came to George Cesnik (Property Manager) who referred them to me. Photos were taken on most trips.

Buddha Property Report (George Cesnik)

We had a number of on-property activities/ workdays last year:

- March 29 Keith Dunlap and George Cesnik mowed the newly established section of trail in the southeast section of the preserve. The rows for planting trees in April were then mowed by Keith and George.
- April 12 One thousand trees: red oak, white oak, chinkapin oak, scarlet oak, and black walnut were planted by approximately 37 volunteers. Eight Boy Scouts from Troop 136 in Bloomington, Indiana, and five Boy Scouts from Troop 88 in Borden, Indiana helped plant the trees. Among the other hard working volunteers were: Steve Lockwood, Tom Sollman, Allen Headley, Micah Walls, Cindy Sandeno, Eric Sandeno, Mark Spriggs, Tom Weiligman, Jerry Lewis, Salisa Lewis, Alex Lewis, Jackie Tucker, Joe Lynch, Greg Sanders, Steve Williams, Dick Vernier, Sue Vernier, Bob Miller, Robert Miller, Everett Pulliam, Mark Krause, Tom Rea, Keith Dunlap, and George Cesnik.

- May 10 Keith Dunlap mowed the parking area and trails. George Cesnik and Keith worked on multiflora rose control. It appeared that most of the trees planted this April were alive and starting to leaf out at this time.
- May 24 George Cesnik checked on the property and applied herbicide to some of the invasive multiflora rose plants.
- June 28 George Cesnik and Cindy Sandeno stomped down weeds around the trees that were planted in April, and Keith Dunlap sprayed Roundup around the saplings. George continued with applying Weed-B-Gone to more of the multiflora rose plants.
- October 25 Information panels were installed on the kiosk that was designed and constructed by Keith Dunlap and roofed by Clyde Simerman. The panels, designed by Cindy Sandeno, included visitation rules, recognition of donors to the property, a trail map, information about the property, and karst education components. Cindy also had the loop trail GPSed and transferred to an aerial photo. Barry Carpenter and Kriste Lindberg provided other artwork for the kiosk panels.

Planned activities for 2009 include planting 1300 more trees on Saturday, April 18, continuing the multiflora rose and other invasives control program and maintaining the loop trail.

Sullivan Cave Patron Report (B Vandeventer)

This report is on the cave activity and visitation for the year of 2008. The first thing to report is something I believe we all know and that is Sullivan cave is the most visited cave we own. I always enjoy talking to all who want to plan a trip to the cave. We had another good year with no major problems other than some stuck locks and one wrong key returned. Here are the numbers along with some "special" events for this year. I was happy to see the liaison trip number almost matching mine. This has been a great help to me in managing the trips.

Number of trips from me:	35
Number of trips from liaisons:	32
Groups camping on property:	7
Total number visiting the cave:	537

There was a trip with Michelle Owens who is the granddaughter of Willie Owens, the long-time former owner of Sullivan Cave. She never had the chance to go into the cave as her grandpa thought it was to dangerous for a girl. It was great talking to her about old times.

Dr Jerry Lewis completed his cave fauna inventory. It looks like Sullivan cave rates high on the amount and types of life found. There were questions from people about the buckets placed there but nobody drank the water so all went well.

There was a trip with *Indianapolis Star* reporter Phil Richards and camera man Steve Healey. They produced a very good story about the cave along with some good pictures and video.

We now have a functional Port-o-let. What else can we say. It is what it is and "sits" on the hill about the parking lot.

Sullivan Property Report (Keith Dunlap)

This was the IKC's tenth full year of ownership. We are basically in "maintenance mode." The trees in the small field, planted in 2000, have grown impressively. Those in the larger field planted in 2001 have not done as well, but are holding their own. No tree replanting or spraying was done in 2008 and none planned in the future.

The "camping" area was mowed at least three times, as was the area by the driveway out by the road. I also fertilized and over-seeded the new terraced area in the spring and mulched the leaves in the fall.

Several members took advantage of the camping area and firewood over the past year, but overall use seemed down. I'm discouraging campers from bringing their own firewood to reduce Emerald Ash Borer transportation.

A porta-potty was donated by Dave Haun, and Bob Vandeventer and I did some fiberglass repair on the roof. The facility was officially dedicated in May. The logistics of servicing the privy still needs to be flushed out.

Locks were replaced on both the lane gate and the cave.

There were no major problems or concerns encountered during 2008.

Wayne Cave Patron Report (Dave Everton)

Records show that 70 different persons visited Wayne Cave during calendar year 2008 in a total of 15 trips, representing 3 grottos through the liaison program, as well as other groups of cavers. The breakout is as follows:

St Joseph Valley Grotto: 1 trip, 6 cavers Central Indiana Grotto: 2 trips, 13 cavers Bloomington Ind Grotto: 8 trips, 29 cavers Patron-arranged: 4 trips, 24 cavers

Two cavers visited two times each (including the Patron); everyone else visited once. There were a total of 70 waiver forms collected, with one person submitting two waiver forms (instead of just one) for the calendar year.

No problems were passed along to the Patron, other than minor difficulties with the lock, which was not changed during the year. Since the Patron never seems to have difficulties with the lock when he checks it, determining when it should be replaced is difficult, if not nearly impossible. If he changed it every time someone reported having difficulty, it would get changed far too often. Some users have not yet learned that some locks are like some women: they need extra and very careful finessing! The Patron intends no offense to anyone by that comment.

This year, it was reported to the Patron that some flagging tape or other similar material was left in the cave between Camps I and II. Although the Patron realizes that some cavers get frustrated with unfamiliarity with the route, and therefore want to make it easier on others to spare them from suffering the same difficulties their group had, he has mixed feelings about leaving those sorts of things. However, in spite of his feelings against leaving the routefinding aids, no effort has been made to remove the material, but he would welcome direction from the cave owner's Directors on the matter. Overall, Wayne Cave seems to be in very reasonable shape, although the area between the entrance and the candles at the end of the RPI passage was the only part visited by the Patron during 2008. Inevitably and inadvertently, small pieces of trash are dropped in both the cave and parking area, but the Patron (and expectedly other cavers) makes effort to remove them when found. Again as in times past, some individuals have expressed difficulty lifting the cave gate from the inside, but it is suspected that fatigue and poor technique both contribute to that problem, although the gate is indisputably heavy.

It is of the Patron's understanding that a biological inventory was conducted during the year, and since he got to accompany Dr Jerry Lewis as he collected specimens on one trip, that led much credibility to that story. Also, although the Patron was not involved, he is aware that a cleanup of the area below the entrance climbdown was accomplished as well; that was something that needed to be done for quite some time, and the Patron applauds that effort, although he hasn't had the opportunity to criticize or scrutinize the results yet.

Wayne Cave continues to be a source of enjoyment and pleasure for the average visitor, although many of them curse or otherwise loathe the moderately difficult, but nonetheless infamous crawlway. A huge thanks goes to the IKC for many years of past protection and restoration, as well as regular continued protection and property improvements.

Wayne Property Report (Robert Sollman)

No report submitted.

Robinson Ladder Property (John Benton)

2008 RLC Property (surface) activity:

- Early January I received a call from Alice Baggett who lives next to the RLC property; she had noticed that the gate on drive lane (just off Hwy 66) had been damaged; the lock was intact, but it appears someone drove into the gate, knocking the gate off its hinges and bowing in the gate. I reported the incident to the Crawford County Sheriffs Dept. It is unknown if the damage was an accident or intentional.
- April 19 IKC Workday (Under-Earth Day) at the property. IKC member Richard "Fig" Newton donated a used farm gate to replace the damaged gate. Ian Newton and John Benton had hung the replacement gate previously. The old damaged gate was hauled away and recycled at the Crawford County Recycle Center. On 4/19, Keith and Bambi Dunlap, Ernie and Jackie Payne, Dick and Sue Vernier, Gordon Smith, John Benton, and others sanded and prime coated the replacement gate. A few weeks later, Keith Dunlap put on the finish coat. Also on 4/19, eradication of grape vines on the property took place and trash pick up (which was minimal) was accomplished. It is believed that the removal of grape vines has been completed for now on the property. The Indiana Cave Symposium was held in Milltown at Cave Country Canoes that evening.
- Late May Jamie Winner mowed the lanes and parking areas.
- May 31/June 1 The Evansville Metro Grotto camp and cave at the property. Also Mark Sparks camps at the property with some other CIG members. Also on that weekend, one set of gate hinges on the left hand barn door on the barn in the upper field are broken (due to normal wear and tear). Eerily, the hinges gave out

during the EMG camp out. These need to be replaced, time and conditions permitting.

- Late August Keith Dunlap mowed the parking areas and access lane.
- Fall The WHIP (Wildlife Habitat Improvement Plan) management of the property saw a planned prescribed burn get cancelled due to late fall conditions and the contract burner missing his window to burn. Jamie Winner is heading this, and plans are to do the burn in Spring of 2009. Per Jennifer Knable, our contact with the local NRCS, "...The contract will expire 9/30/2010. The work must be completed by 9/30/2009. The practice was originally scheduled for 2006. We have since rescheduled for 2007 and again for 2008. We cannot reschedule it again. As long as the work gets completed and I (Knable) certify it in the system before 9/30/2009 we should be OK. Hopefully, the IKC will be able to get the burn done this spring. A payment cannot be made in the last year of the contract, which must be operation and maintenance. These are 5 year contracts." [Editor's note: The burn did get completed in the spring of 2009 – see page 9.]
- Late December Dr Jerry Lewis announced that TNC (The Nature Conservancy) has granted an extension of IKC grant for purpose of the prescribed burn at Robinson Ladder Cave property.

Robinson Ladder Cave Report (John Benton)

2008 Robinson Ladder Cave activity:

- May 4 Keith Dunlap makes a solo trip to check on bats in the entrance area (looking for signs of white-nose syndrome).
- May 31 Ernie Payne leads a group of 11 from IN and KY; including Richard and Sue Vernier, Bob Sergesketter, Steve and Stephanie Weinzapfel, Jim and Erik Hall, Chris Pierson, Greg Dunwoody, and Terry Clark.
- June 21 Nathan Lowren (?), Shelia Whitely, John, Aaron Jacob Ohler from Portsmouth OH area visit the cave.
- Sept 20 Keith and Bambi Dunlap installed temperature/RH data loggers near entrance.

Summary: 4 trips; 3 states represented (KY, IN, OH); 18 people total, high of 11, low of 1. No incidents reported. Bat population appears stable.

Coon & Grotto Patron Report (Keith Dunlap)

There were no known incidents or accidents reported to the Patron during CY2008.

For Coon, there were 3 authorized recreational trips and 2 service trips (equipment maintenance) involving 26 cavers. Trips were arranged through the CIG, BIG, and SJVG liaisons and the Patron. The largest trip was a CIG grotto trip with 14 using an extension ladder at the entrance.

For Grotto, there were 5 authorized recreational trips and 2 service trips involving 24 cavers. Likewise trips were arranged through the same contacts.

There were no unauthorized visits recorded in either cave by the monitoring speloggers during the hibernacula closure period (9/2007 to 4/2008). Since the alarm systems were installed in 1996, there has been only one violation combined.

The temperature-monitoring project continued in both caves (started the fifteenth annual deployment on 9/2008). We also deployed a new-generation datalogger recording temperature and humidity.

The annual report to the property owner was composed and mailed on 12/28/08.

I made several "drive-by" checks of the property during the past year. The caves remain in good condition and no in-cave clean-ups are planned.

Shiloh Patron Report (James Adams)

The Indiana Karst Conservancy has continued, with the permission of the landowner, to permit up to six trips into Shiloh Cave for the general caving community per year. Each trip is limited to 10 participants with three vehicles on the property. During 2008, only two trips were taken into the cave. These took place on Saturday, August 16 and Saturday, October 12. A third trip was scheduled in November but had to be cancelled due to a serious illness of the trip organizer. Both of the trips were small, totaling only 11 cavers.

A letter has been sent (3/6/2009) to the landowner with this brief summary and thanking them, on behalf of all visitors, for continuing to make Shiloh Cave accessible to the caving community.

Suicide Patron Report (Ronnie Burns)

Please accept this 2008 annual report for the activities of Suicide Cave in Washington County. Visitation was light to moderate with only four trips for the year. There were no known injuries, lost cavers, or reportable mishaps.

The condition of the cave remains excellent with no known trash, litter, or graffiti. Several cavers reported problems getting the lock on and off the gate. As a result, I cleaned the moving parts of the gate with a wire brush and replaced the lock with one that has a slightly smaller shank. The gate and lock are now much easier to operate.

The gate itself has trapped quite a bit of rubble and debris that is now built up past the bottom of the gate opening, a height of well over a foot. I would recommend a work day to dig out the rubble. For me, the best time of the year will be sometime after the latter part of August. I will be glad to furnish shovels, buckets, and other tools. I would think that it would take no more than a couple of hours to dig everything out.

I have in my file signed waivers for all visitors. In reviewing the contract with the property owner, I believe we are entirely in compliance.

Shaft Patron Report (Jeff Cody)

In the past year, there were only five trips to Shaft. I suspect the trips were down because of high gas prices. These trips had a total of 15 people who filled out waivers. No reports were made to me regarding any incidents. Two of the trips were in the spring, one in the winter and, one in the summer.

On August 3, I made my annual trip into the cave to check for any trash or anything out of the ordinary. My party of 4 went back to the big room, then back out. I did not see anything unusual, only the normal trash at the bottom of the main pit. The property appeared to be in good shape. I only had to pick up a couple of cups and a little fast food trash at the parking area, no beer bottles. The large wooden sign at the parking area is showing some wear. Lots of downed trees, just like last year.

Orangeville Rise Report (Steve Lockwood)

The property continues to attract trash due to the large road frontage and seasonal flooding but is remaining relatively clean between trash pickups. Trash was collected from the property in April 2008, June 2008, and December 2008. Every cleaning of the property yielded a large garbage bag full of trash or more. The trash collected included glass bottles, plastic bottles, plastic jugs, plastic cups, plastic bags, tires, boards, and etc.

The fence built in 2003 on the western side of the property has collected more flood debris but remains straight and structurally sound. The concrete property markers installed in 2004 are still intact on the east and west sides of the property. The west bank of the Orangeville Rise streambed at the intersection of the Lost River

IKC UPDATE No 93

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PAGE 18

streambed continues to erode closer to the fence posts along the west property line.

Activities planned for 2009 include quarterly trash pickups, and cleaning further trash from a

small ravine located on the west side of the property which contains old bicycles, fencing, boards, posts, and other items.

Income/Expense Statement From January 1, 2009 to March 31, 2009				
INCOME:				
Dues Apportionment and Residuals	678.75			
Donations - General	1470.78			
Donations - Land Acquisition Fund	576.00			
Laser Calipers Interest	1685.00 218.11			
interest	210.11	\$4,628.64		
EXPENSES:		• ,•==•••		
IKC Update (printing, production, mailing)	276.81			
Education / Outreach	81.96			
Stewardship	1954.50			
Laser calipers	1431.35			
Business (ballots, renewal letters, etc)	141.69			
Transfers to/from restricted funds/other adjustments	796.97	(\$4,683.28)		
		(\$1,000.20)		
NET OPERATING EXCESS (DEFICIT) THIS PERIOD:	-	(\$54.64)		
ASSETS:				
Cash in Checking / Saving Accounts / CDs	99543.80			
Cash in Checking / Saving Accounts / CDs Wayne Cave Preserve (20.00 acres)	75000.00			
Cash in Checking / Saving Accounts / CDs Wayne Cave Preserve (20.00 acres) Robinson Ladder Cave Preserve (40.40 acres)	75000.00 75000.00			
Wayne Cave Preserve (20.00 acres) Robinson Ladder Cave Preserve (40.40 acres) Sullivan Cave Preserve (28.00 acres)	75000.00 75000.00 72000.00			
Cash in Checking / Saving Accounts / CDs Wayne Cave Preserve (20.00 acres) Robinson Ladder Cave Preserve (40.40 acres)	75000.00 75000.00			
Cash in Checking / Saving Accounts / CDs Wayne Cave Preserve (20.00 acres) Robinson Ladder Cave Preserve (40.40 acres) Sullivan Cave Preserve (28.00 acres) Buddha Karst Nature Preserve (36.84 acres)	75000.00 75000.00 72000.00 29000.00			
Cash in Checking / Saving Accounts / CDs Wayne Cave Preserve (20.00 acres) Robinson Ladder Cave Preserve (40.40 acres) Sullivan Cave Preserve (28.00 acres) Buddha Karst Nature Preserve (36.84 acres) Orangeville Rise Nature Preserve (3.01 acres)	75000.00 75000.00 72000.00 29000.00 7000.00	\$357,556.96		
Cash in Checking / Saving Accounts / CDs Wayne Cave Preserve (20.00 acres) Robinson Ladder Cave Preserve (40.40 acres) Sullivan Cave Preserve (28.00 acres) Buddha Karst Nature Preserve (36.84 acres) Orangeville Rise Nature Preserve (3.01 acres) Indian Creek Conservation Easement (valued at \$1/acre)	75000.00 75000.00 72000.00 29000.00 7000.00	\$357,556.96		
Cash in Checking / Saving Accounts / CDs Wayne Cave Preserve (20.00 acres) Robinson Ladder Cave Preserve (40.40 acres) Sullivan Cave Preserve (28.00 acres) Buddha Karst Nature Preserve (36.84 acres) Orangeville Rise Nature Preserve (3.01 acres) Indian Creek Conservation Easement (valued at \$1/acre)	75000.00 75000.00 72000.00 29000.00 7000.00	\$357,556.96		
Cash in Checking / Saving Accounts / CDs Wayne Cave Preserve (20.00 acres) Robinson Ladder Cave Preserve (40.40 acres) Sullivan Cave Preserve (28.00 acres) Buddha Karst Nature Preserve (36.84 acres) Orangeville Rise Nature Preserve (3.01 acres) Indian Creek Conservation Easement (valued at \$1/acre)	75000.00 75000.00 72000.00 29000.00 7000.00 13.16	\$357,556.96		
Cash in Checking / Saving Accounts / CDs Wayne Cave Preserve (20.00 acres) Robinson Ladder Cave Preserve (40.40 acres) Sullivan Cave Preserve (28.00 acres) Buddha Karst Nature Preserve (36.84 acres) Orangeville Rise Nature Preserve (3.01 acres) Indian Creek Conservation Easement (valued at \$1/acre)	75000.00 75000.00 72000.00 29000.00 7000.00 13.16 = 34692.59	\$357,556.96		
Cash in Checking / Saving Accounts / CDs Wayne Cave Preserve (20.00 acres) Robinson Ladder Cave Preserve (40.40 acres) Sullivan Cave Preserve (28.00 acres) Buddha Karst Nature Preserve (36.84 acres) Orangeville Rise Nature Preserve (3.01 acres) Indian Creek Conservation Easement (valued at \$1/acre) LIABILITIES & OPERATING EXCESS: Land Acquisition Restricted Fund Deferred Dues Restricted Fund (188 members) Stewardship Endowment Restricted Fund	75000.00 75000.00 72000.00 29000.00 7000.00 13.16 = 34692.59 3705.00 29683.61	<u>\$357,556.96</u>		
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Cash in Checking / Saving Accounts / CDs Wayne Cave Preserve (20.00 acres) Robinson Ladder Cave Preserve (40.40 acres) Sullivan Cave Preserve (28.00 acres) Buddha Karst Nature Preserve (36.84 acres) Orangeville Rise Nature Preserve (3.01 acres) Indian Creek Conservation Easement (valued at \$1/acre) LIABILITIES & OPERATING EXCESS: Land Acquisition Restricted Fund Deferred Dues Restricted Fund (188 members) Stewardship Endowment Restricted Fund Previous Operating Excess 31500.40 Net Excess (Deficit) This Period (54.64	75000.00 75000.00 72000.00 29000.00 7000.00 13.16 = 34692.59 3705.00 29683.61	<u>\$357,556.96</u>		
Cash in Checking / Saving Accounts / CDs Wayne Cave Preserve (20.00 acres) Robinson Ladder Cave Preserve (40.40 acres) Sullivan Cave Preserve (28.00 acres) Buddha Karst Nature Preserve (36.84 acres) Orangeville Rise Nature Preserve (3.01 acres) Indian Creek Conservation Easement (valued at \$1/acre) LIABILITIES & OPERATING EXCESS: Land Acquisition Restricted Fund Deferred Dues Restricted Fund (188 members) Stewardship Endowment Restricted Fund Previous Operating Excess 31500.40	75000.00 75000.00 72000.00 29000.00 7000.00 13.16 = 34692.59 3705.00 29683.61	\$357,556.96		

IKC ANNUAL MEETING MINUTES

Saturday, March 21, 2009 - Johnson County Library, White River Branch, Greenwood, Indiana

BOARD MEMBERS PRESENT:

Jerry Lewis, President James Adams, Secretary Keith Dunlap, Treasurer Bruce Bowman Dave Haun Don Ingle Kriste Lindberg Steve Lockwood Bob Sergesketter Bruce Silvers Karen Silvers Tom Sollman Bob Vandeventer Richard Vernier Jamie Winner

BOARD MEMBERS ABSENT:

None

The Executive meeting was called to order at 10:00 AM at the White River Branch of the Johnson County Public Library in Greenwood, Indiana, President Lewis presiding. There were no proxies (the full Board was present). Minutes of the December 2008 meeting were accepted as published in the March 2009 IKC Update.

Approval of the Election Slate

Prior to this meeting, an e-mail motion was approved by the Executive Board. February 7, 2009 - President Lewis proposed a slate for the March election as required by the bylaws and called for the motion to accept and discussion. Board member Haun moved to accept the proposed slate. February 8, 2009 - Board Member Winner seconded the motion. President Lewis called for e-mail vote on the following:

Motion made to approve the proposed slate and seconded, as follows:

Jerry Lewis	President
Jim Adams	Secretary
Keith Dunlap	Treasurer
Director	Dave Haun
Director	Bill Schulze
Director	Bruce Silvers
Director	Karen Silvers
Director	Tom Sollman

February 11, 2009 - Motion passes, 15-0-0.

Treasurer's Report

Treasurer Dunlap reported total assets of \$358,819.68 including \$100,819.68 in cash and \$258,000 in land. Totals for the following funds were reported: Land Acquisition, \$34,626.59; Stewardship, \$29,462.64; Deferred Dues, \$3,555.00; General Fund, \$33,175.45. We currently show 188 members on our roster, with 140 already renewed for 2009 (current dues expire 3/31/2009).

Board Elections

Tom Rea was appointed as election teller.

No nominations were received from the floor. Bruce Bowman moved to accept the three officers by acclamation. Dick Vernier seconded. Officers are President: Jerry Lewis; Secretary: James Adams; Treasurer: Keith Dunlap. Motion Passed by the membership, 15-0-1.

Four Directors were elected. Dave Haun, Bruce Silvers, Karen Silvers and Tom Sollman were elected to three-year terms. Adams moved to destroy the ballots. Dunlap seconded. Motion passed, 15-0-0.

All terms begin on April 1, 2009.

Robinson Ladder Cave Preserve Report

A report regarding the Robinson Ladder Cave Preserve was received from John Benton. Winner reported that on the March 18, 2009 a prescribed burn took place at the property. He brought photos. The lower field burned fairly well. The upper field was less successful due to less vegetation, but the burn crew was successful in slightly singeing one side of the barn.

There was discussion on future burns at the property.

Dunlap moved that we pursue enrolling the property in the Classified Forest/Wild Lands Program. Lockwood seconded. Motion passed, 15-0-0.

Dunlap reported the recent bat count was down this year in Robinson Ladder Cave. He expects that counts at many caves will be lower. However, there has been no evidence of White Nose Syndrome.

Orangeville Rise Report

A report on activities at the Orangeville Rise was received from Lockwood. General cleanup and trash pickup are the key items that will continue to be scheduled.

Wayne Cave Preserve Report

A report from Dave Everton, Wayne Cave Patron, was received. Visitation was up in 2008. Sollman verbally reported on the property for Robert Sollman. Some downed trees were cut, and the parking area and lane gate are in good shape. Dunlap reported that as part of the I-69 mitigation, any forest acreage that is destroyed by road construction will be replaced in a 3 to 1 ratio. The IKC is one of approximately 100 property owners identified for this program. The Wayne Cave property could be put into a conservation easement and the Conservancy would be compensated for a portion of the value of the property.

Vernier moved to confirm with InDOT that we are interested in the program. Bruce Bowman seconded. Motion passed, 15-0-0.

There was discussion of the IKC purchasing the adjoining 11+ acres to the property currently owned by Dunlap. This purchase would re-unite the original parcel. Haun moved that, following an independent appraisal, the IKC pursue purchasing the property adjacent to the Wayne Property, contingent upon InDOT pursuing a conservation easement on the entire property for I-69 mitigation. Seconded by Vernier. Motion passed, 14-0-1.

Indian Creek Conservation Easement Report

No report was received on the Indian Creek Conservation Easement.

Information was recently circulated to the Board regarding a proposal for developing conservation defense insurance. The developer of the insurance program is asking for land trusts such as the IKC to make a threeyear commitment along with an up-front registration fee (\$250.00) to develop the program and then enroll in the insurance program. We will also likely need to join the Land Trust Alliance. The availability of the program might make the easement look more attractive if we transferred the easement in the future.

Many questions remain and Dunlap will communicate directly with the Land Trust Alliance organizers and report back to the Board. No motion.

Buddha Cave Preserve Report

Jeff Cody submitted a report on Buddha Cave visitation. George Cesnik submitted his property manager's report. Neither had any issues to report.

Under-Earth Day is scheduled for April 18, 2009 at 10:00 AM at the Buddha Preserve and 1300 trees will be planted. Two Scout troops are expected to assist again this year. The Indiana Cave Symposium is also scheduled for later in the day near Bedford.

Sullivan Cave Preserve Report

Vandeventer submitted a report on visitation at Sullivan Cave. Including visitation by 537 people with many more contacts for information only. Dunlap submitted a report on the Sullivan Preserve property. No issues to report.

Shiloh Cave Report

Adams reported limited activities at Shiloh Cave in 2008.

Suicide Cave Report

Ron Burns submitted his annual report on Suicide Cave. Our lease agreement has expired. Bowman negotiated the last lease and agreed to work with Burns to contact the property owner.

Coon & Grotto Caves Report

Dunlap reported on activities at both caves and the property. The Grotto Cave bat count was up (one of few). Coon Cave remained even.

Shaft Cave Report

A report on Shaft Cave visitation was received from Cody. No problems to report.

Land Acquisition Activities

The owners of the property next to Buddha Cave Preserve were approached and they are not interested in selling their land at this time, but may be interested in the future. They liked the concept of preserving their property as part of a nature preserve.

Education and Outreach Report

Lindberg reported that 21 events with 3,000 attendees were held in 2008. A quarterly report was included in the March *IKC Update*. The April issue of the *NSS News* will also feature an IKC article. Bowman moved to purchase an additional ground water model not to exceed \$800. Vernier seconded. Motion passed, 13-0-2.

The Education and Outreach Committee will have their quarterly meeting directly following this annual meeting.

Indiana Bats

Dunlap reported on the Indiana bat biennial count. Population counts appear to be down at most cave locations. A more complete report will be presented at the Indiana Cave Symposium on April 18, 2009. No White Nose Syndrome has been reported in Indiana.

A meeting hosted by the IKC and TNC concerning acquisition of one or more Indiana bat hibernacula is being planned.

Cave River Valley: Endless Cave Gating

A revised management plan has been published for Cave River Valley near Campbellsburg. There is interest in gating Endless Cave and the IKC might participate in order to protect the Indiana bat population. Dunlap is working on design proposals. The DNR would like to have the gate in place by August 31, 2009.

Lewis has scheduled a meeting with Spring Mill property manager Mark Young to discuss the CRV management plan and possible cooperative projects.

Indiana Cave Symposium

The Indiana Cave Symposium is scheduled for April 18, 2009 beginning with a pitch-in dinner at 5:00 PM.

The location is the Lawrence County Fairgrounds in the Community Building. The IKC and the Indiana Cave Survey sponsor the event. The HNF/IKC Committee may also have a meeting that day at the fairgrounds.

Items From the Floor

Cody noted that the NSS is considering moving their office to Bloomington. Tom Rea noted that other sites have also been proposed. The NSS Board will study various proposals and hope to vote at the NSS Convention.

Continued from page 12...

nificant improvements between their pre and post quizzes, often times show 20% increase or more! Those are pretty good numbers. And, when asked what the kids like most about the event, they mentioned learning about the caves, inluding the karst groundwater model demonstration, and poking their heads into a cave entrance. Thanks to Dave Everton for being there to operate the Karst 2 station each day this spring! And, thanks to *The Herald-Times* for their article covering the event.

At the beginning of April, we were invited to bring our inflatable cave to Harmony School's (in Bloomington) Science Fair. It was a big hit, as you can imagine!

Also in April, we partnered with Sycamore Land Trust to work with a fourth grade accelerated class at Edgewood Intermediate School in Ellettsville to teach them more about the physical structure of sinkholes. Over a few weeks time, we worked with the class to teach them about karst (including showing them the *Caves: Life Beneath the Forest* video), bring them into a sinkhole so they could do measurements (it was fun to see twenty plus students stretching tape around the perimeter), and construct 3-D models of Dunlap reported that he has designed, fabricated, and sold ten laser calipers netting about \$300 for the IKC.

Next Meeting

The next meeting was set for June 27, 2009 in Bloomington, Indiana at the IU Geology Building beginning at 6:00 PM. Meeting adjourned at 12:33 PM.

Respectfully submitted, James Adams, IKC Secretary

the sinkhole. The students are now interested in doing a cleanup of the sinkhole and helping to protect it with a native plant buffer. This partnership is being considered for a HASTI presentation, as well!

Speaking of the Sycamore Land Trust, together with Bloomington Parks and Recreation, we hosted a Limestone History Tour in Lawrence County. One of the stops was to Elliot Stone Quarry. As some of you may know, it is the location of the spring entrance to Shiloh Cave. They were kind enough to lead us on a tour of the underground quarry, as well. It was quite fascinating. We are fortunate to have such conscientious business owners to work with. The combination of environmental, economic, and social concerns is a winner for sustainability.

Our next IKC Education and Outreach Committee meeting will be held at 5 PM (one hour before the IKC Quarterly Meeting), in Bloomington where we will discuss WNS, the NSF grant in relation to traveling trunks, the database, funding, the upcoming Project Underground workshop and more. If you would like more information on any of the above and/or wish to help, please contact me at at kriste.lindberg@gmail.com or (812) 339-7210.

	INDIANA KARST CONSERVANCY, 1	PO BOX 2401, INDIANAPOLIS, IN 46206-2401		
I would like t	o help the IKC protect Indiana's unique caves and o	other karst features. Enclosed is:		
\$	for IKC membership dues at \$15 per year (dues expire March 31st of each year, please pro-rate @ \$1.25/month).			
\$	donation to the general IKC fund.			
\$	donation restricted to a specific IKC project. Please specify:			
	I know of an area worthy of protection. Please c	ontact me.		
	I would like to volunteer to help. Please contact	mc.		
NAME		Make checks payable to the Indiana Karst Conservancy, Inc. and mail to the		
ADDRESS		IKC Treasurer, c/o Indiana Karst Conservancy, PO Box 2401, Indianapolis, IN 46206-2401. The IKC is an IRS recognized 501(c)(3) non-profit organiza-		
CITY/STATE/ZIP		tion with membership dues and donations fully tax deductible.		
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